THE AGRICULTURAL SITUATION

APRIL 1945

A Brief Summary of Economic Conditions

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IN THIS ISSUE

FARMERS reported in March that this year they intend to grow about the same acreage of crops as in 1944. The projected total for the 52 principal crops would be 364 million acres, which is 2 to 3 percent below the 1945 goals. In early April, War Food Administrator Marvin Jones urged farmers to plant up to the goals, saying: "Nothing is more important in the entire war effort than for farmers to drive ahead with their production schedules, despite wartime handicaps. * * * The production pattern established by the goals is still the most practical balance for 1945." The Administrator asked for bigger acreages of flaxseed, soybeans, peanuts, potatoes, sweetpotatoes, dry beans, sugar beets, feed grains, forage crops, hay and pasture. * * * General economic conditions point to a continued strong demand for farm products. Nonagricultural income payments in 1944 totaled 141.1 billion dollars, 10 percent above 1943 and 130 percent above the 1935–39 pre-war average. In addition, net savings of individuals amount to nearly 40 billion dollars in 1944, compared with the 5.5 billion dollar pre-war average. * * * Farm land values on March 1 were 52 percent higher than the 1935–39 average, with quick turnover in ownership continuing to increase, suggesting the need for measures to control excessive rises.

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National Economic Conditions in 1944

THE extremely high level of demand for farm products in 1944 was primarily because of the Nation's war production effort, resulting in the largest gross national product and national income ever achieved in the United States.

Gross national product—the total value of currently produced goods and services flowing to Government, to consumers, and for purposes of gross capital formation to business—amounted to 198.7 billion dollars in 1944. This is nearly 6 percent larger than 1943, and 143 percent above the prewar (1935–39) average. Total Government expenditures amounted to one-half of the gross product in 1944 as compared with only 17 percent in 1935–39. Nearly 87 percent of total Government expenditures in 1944 were for war purposes. Nonwar expenditures were slightly lower in 1944 than in 1935–39. Consumer expenditures for goods and services increased 66 percent from 1935–39 to 1944 but constituted only 49 percent of the gross national product last year in contrast to 72 percent in 1935–39.

National income for the year 1944 totaled 160.7 billion dollars, 8 percent more than in 1943, and 146 precent above the 1935–39 average. Nonagricultural income payments received by individuals in 1944 amounted to 141.1 billion dollars. This is an increase of 10 percent over the previous year, nearly one-fifth greater than the increase in national income. Increased payments to military personnel accounted for a considerable part of the rise in nonagricultural income payments in 1944. The wage income of industrial workers was only 2 percent higher in 1944 than in 1943. However, the percentage increase from 1935–39 to 1944 in industrial workers' incomes was considerably greater than that for total nonagricultural income payments—226 percent as compared with 131 percent.

Part of the increase in national income during 1944 was due to price rises and to that extent does not rep-

Economic Conditions in the United States—War and Prewar

	Unit	1935–39	1942	1943	1944
Gross national product [1]	Bil. dollars	81.9	151.5	187.8	198.7
Government expenditures: [1]					
Total	do	13.7	62.0	94.8	99.4
War	do		49.5	82.5	86.3
Consumer expenditures [1]	do	58.8	81.9	90.9	97.6
National income [1]	do	65.4	122.2	149.4	160.7
Nonagricultural income payments [1]	do	61.1	104.5	127.7	141.1
Income of industrial workers [2]	do	10.8	26.1	34.4	35.2
Cash farm receipts [2]	do	8.0	15.5	19.3	20.2
Net savings of individuals [1]	do	5.5	28.8	33.7	39.9
Industrial production: [3]					
Total	1935–39=100	100.0	199.0	239.0	235.0
Munitions	1943=100		56.0	100.0	112.0
Wholesale prices: [4]					
All commodities	1926=100	80.6	98.8	103.1	104.0
All commodities except farm and food	1926=100	81.2	95.5	96.9	98.4
Farm products	1926=100	76.0	105.9	122.6	123.5
Food	1926=100	79.1	99.6	106.8	105.0
Cost of living: [4]					
Total	1935–39=100	100.0	116.5	123.6	125.5
Food	1935–39=100	100.0	123.9	138.0	136.1
Nonfood	1935–39=100	100.0	112.6	115.7	120.0
Foreign trade: [1]					
Exports:					
Total	Bil. dollars	2.9	8.0	12.7	14.3
Lend-lease	do		4.9	10.1	11.3
General imports	do	2.4	2.7	3.4	3.9

[1] Department of Commerce.
[2] Bureau of Agricultural Economics.
[3] Federal Reserve Board.
[4] Bureau of Labor Statistics.

resent any increase in physical production. The 1 percent rise in the index of wholesale prices during 1944 is equivalent to about one-eighth of the increase in national income, while the 1½ percent rise in the cost-of-living index is equivalent to nearly one-fifth of the increase.

Cash farm receipts in 1944 were 5 percent above the previous year and 152 percent above the prewar average. These increases were the result of greatly expanded production and somewhat higher prices.

The net savings of individuals totaled 39.9 billion dollars in 1944, more than six times the prewar average and 18 percent above 1943. Individuals invested about one-third of their 1944 savings in war bonds. The remainder was used to increase bank deposits and currency holdings, to retire debts and for many other purposes.

Industrial production reached its wartime peak in 1943. It declined 2 percent in 1944, but the index was still 235 compared to 100 for 1935–39. The production of munitions continued to increase. The output in 1944 was 12 percent above 1943 and double 1942.

Employment in all nonagricultural establishments during January of this year totaled 37.9 million persons. This is 3 percent below the number employed in January 1944 and is the lowest since April 1942. Employment in manufacturing during January 1945 was 8 percent smaller than a year earlier, employment in mining dropped 7 percent and construction saw a 24 percent decline.

Wholesale prices have been largely stabilized throughout 1943 and 1944. The index for all commodities rose about 1 percent from 1943 to 1944. Food prices declined a little, while prices of farm products and all of commodities other than farm and food products increased slightly. Compared to prewar, the greatest increase has occurred in the prices of farm products—62 percent as compared with 21 percent for all commodities except farm and food products.

The cost of living in large cities increased one-fourth from 1935–39 to 1944. Food costs rose about one-third and nonfood costs one-fifth during this period. However, from 1943 to 1944 food costs declined slightly while nonfood costs increased 4 percent, and as a result the total cost of living increased 1.5 percent.

The large volume of exports from the United States during the war has been an important factor in establishing and maintaining the present high level of demand for farm products. The total value of exports from the United States in 1944, not including shipments abroad to our own military forces, amounted to 14.3 billion dollars—nearly five times the average for 1935–39 and 12.5 percent above 1943. Exports under lend-lease in 1944 were valued at 11.3 billion dollars. This is nearly four-fifths of all exports and is equal to about 10 percent of last year's total production of movable goods in the United States.

Exports of agricultural products in 1944 constituted about 16 percent of the value of all lend-lease shipments and a somewhat smaller proportion of other exports. However, exports of foodstuffs, including lend-lease, amounted to about 8 percent of the total value of food produced in the United States in 1944, compared with 3 percent for prewar. Also food production in the United States in 1944 was over a third larger than in prewar years.

The value of imports in 1942, the first full year of war for the United States, was 12.5 percent above the 1935–39 average. In 1944 the increase above prewar amounted to 62 percent. About 40 percent of imports during 1943 and 1944 has consisted of military, strategic, and critical materials as compared with 27 percent of similar commodities in prewar years.

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Commodity Reviews

PLANTING INTENTIONS

THE Nation's farmers this year intend to plant some 364 million acres of the country's 52 principal crops, if plans indicated by the March 1 intentions of crop reporters fully materialize and the cotton acreage is about the same as last year. This acreage would be about 2 to 3 percent below the 1945 goals, but about the same as that actually planted in 1944, and 3 percent above 1934-43 average planted acreage. Changes in such conditions as weather, prospective labor and machinery supplies and prices may alter farmers' plans and thus change the 1945 acreage.

Prospective acreages of oats, flaxseed, rice, tobacco and sugar are larger than those actually planted in 1944, while somewhat smaller acreages are indicated for corn, spring wheat, potatoes, sweetpotatoes, soybeans, and peanuts. Larger declines are in prospect for barley, sorghums, dry beans and dry peas. The tame acreage is expected to be about the same.

Although the acreage reductions nearly offset the increases, this may not be true of production as the greatest acreage reductions appear to be in some of the least productive areas. Present indications point to a close utilization of the really productive land in all States. and production prospects appear better than usual for this time of year. Although fruits have started to bloom too early for safety and no acreage or production information is available about cotton, total output of other crops, if growing conditions are average, could equal the excellent showing made last year.

Substantial reductions in intended acreages are reported by farmers in a large southern area extended across half a dozen States from South Carolina to Louisiana and Arkansas, and nominal reductions in a dozen other States are indicated. But small increases are planned in a number of States, mostly on the Pacific Coast and in the northern and central areas where acreages were reduced last year by wet weather and floods at planting time or by the dry summer which reduced the acreage of hay cut.

Total feed grain and hay acreage in prospect for 1945 is about 230 millions acres, 1½ percent below 1944 but 2½ percent above the 1934–43 average. Corn is 3 percent under 1944 plantings, with the largest percentage reductions in the Southern States. But, Iowa, Minnesota, Wisconsin, Michigan and South Dakota plan larger acreages.

The spring wheat acreage in prospect for 1945 is 2 percent below 1944, but the acreage of winter wheat planted last fall for 1945 harvest is 7 percent above the previous year. Consequently, the total acreage of all wheat indicated for 1945 is 4½ percent or nearly 3 million acres larger than the 1944 acreage.

The acreage intended for flax is 37 percent above that of the previous year but 34 percent below the record plantings of 1943. The acreage of both soybeans and peanuts intended for 1945 is about 2 percent below 1944, but much larger than the 1934–43 average acreages.

Prospective plantings of sugar beets in 1945 total 768 thousand acres—20 percent more than were planted in 1944, as suggested by the goals, but 13 percent under the 1934–43 average. The largest percentage increases in acreage in prospect are in Michigan, 45 percent; Wyoming, 29 percent; Ohio, 24 percent; Idaho, 20 percent; and California, 19 percent.

There does not appear to be any large area in the country where farmers are seriously handicapped by weather, finances, shortages of seed or shortages of feed Tractors are being substituted for horses as fast as machines can be made available. Wartime difficulties,

including delays in transportation, and shortages of manpower, equipment, and some supplies, tend to limit expansion, but present conditions would permit another year of big crops if future weather permits.

1945 Planning Intentions, with Comparisons

Crop	Planted acreage		
	1944 actual	1945 goal	1945 prospective
		(*Thousands*)	(*Thousands*)
Corn, all	98, 722	99, 098	95, 778
Wheat, all	65, 684	67, 731	68, 597
Winter	46, 349	-------	[1] 49, 589
Spring	19, 335	-------	19, 008
Oats	42. 983	44, 259	46, 555
Barley	14, 300	13, 911	12, 285
Flaxseed	3, 052	5, 000	4, 175
Rice	1, 482	1, 405	1, 507
Sorghums, all [2]	18, 212	-------	16, 285
Sorghums, all (excl. sirup)	18, 017	17, 155	[3] 16, 090
Potatoes	3, 010	3, 137	2, 893
Sweetpotatoes	777	841	715
Tobacco	1, 712	1, 803	1, 782
Dry beans	2, 228	2, 277	1, 971
Dry peas	727	457	427
Soybeans, grown alone [2]	13, 564	-------	13, 236
Soybeans for beans [4]	10, 502	10, 757	[5] 10, 334
Peanuts, grown alone [2]	4, 012	3, 955	3, 923
Peanuts, picked and threshed [4]	3, 212	3, 230	[6] 3, 118
Tame hay, all [4]	59, 547	62, 862	59, 487
Sugar beets	639	951	768

[1] BAE Winter Wheat and Rye Report of December 20, 1944.
[2] For all purposes.
[3] All sorghum acreage less 1944 acreage harvested for sirup, by States.
[4] Harvested acreage.
[5] 1945 indicated solid equivalent acreage adjusted for the percentage harvested for beans.
[6] Assuming the usual relationship of acreages planted alone to acreages for picking and threshing, by States.

LIVESTOCK

LARGE purchases of meat for war uses, strong civilian demand, reduced output, and the current low level of meat stocks, will tend to maintain prices for meat animals, through the summer at least, near the maximum limits under price controls on meat and live animals. Prices received by farmers for most meat animals will average higher in 1945 than in 1944.

Hog slaughter throughout the remaining months of the hog marketing year (through September) probably will be 25 to 30 percent below a year earlier. However, pork production will not be reduced in proportion to the reduction in slaughter.

Cattle and calf slaughter, now at record levels for this time of year, is likely to continue at a high level throughout the remainder of the year.

Slaughter of sheep and lambs in the remaining months of this year probably will be smaller than a year earlier, reflecting 6 percent smaller early spring lamb crop to be marketed largely before July 1 and a probable smaller late crop.

DAIRY PRODUCTS

MILK production during January and February was at a record rate and will probably continue for the next few months, reflecting the highest unit returns and ample feed supplies.

The higher payment rates for butterfat should tend to check further declines in creamery butter output. At present butter production is about 6 percent below 1944. Because of large non-civilian requirements, the set-aside for April and May is 40 and 55 percent, respectively. These percentages are substantially higher than those in effect last year for corresponding months.

POULTRY AND EGGS

PRICES received by farmers for eggs for the next few months will probably average higher than in corresponding months of 1944. This will be primarily due to record per capita egg consumption and large military requirements. Although egg production will be 8 to 10 percent smaller than in the same months of 1944, declines in eggs used for dehydrating purposes will make more eggs available for civilians. Shortages of other foodstuffs, especially meat, have put pressure on the egg supplies largely as substitutes.

Poultry meat supplies will be in-

Index Numbers of Prices Received and Paid by Farmers

[1910-14=100]

Year and month	Prices received	Prices paid, interest and taxes	Parity ratio [1]
1935-39 average	107	128	84
1940	100	125	80
1941	124	132	94
1942	159	150	106
1943	192	162	119
1944	195	170	115
1944			
March	196	169	116
April	196	169	116
May	194	169	115
June	193	170	114
July	192	170	113
August	193	170	114
September	192	170	113
October	194	170	114
November	196	171	115
December	200	171	117
1945			
January	201	172	117
February	199	172	116
March	198	173	114

[1] Ratio of prices received by farmers to prices paid, interest and taxes.

creasing seasonally but below last year. Armed forces' requirements have been announced at 670 million pounds, almost double those of last year. Accordingly, War Food Administration is urging poultry producers to raise more chicks for poultry meat purposes only. Futhermore, in order to bring about an increase in production of poultry meat, the Office of Economic Stabilization has authorized the Office of Price Administration to increase price ceilings on young chickens, averaging 1¼ cent increase per pound. This should result in higher returns than last year to producers of poultry meat.

FEED

IF FARMERS carry out their March 1 intentions, the combined acreage of the four feed grains in 1945 will approximate 163 million acres. This would be a decrease of about 1.5 percent from the 1944 acreage, but 5 percent more than the 1939–43 average. If yields, by States, turn out about as in recent years the production of the four feed grains on this indicated acreage would total about 119 million tons, or only 2 million tons less than the near-record production in 1944. However, weather and other factors affecting production could materially change this prospect.

In addition to a continued strong demand for livestock products, livestock-feed price ratios are likely to remain favorable for producers during most of 1945. Also, all kinds of hay, as well as alfalfa which has been under price ceilings, become subject to price control beginning May 1.

TRUCK CROPS

AGGREGATE tonnage of winter-season commercial vegetable crops totaling 1.4 million tons this past winter was 7 percent below 1944 but 47 percent above the 1934–43 average. The bulk of these crops is harvested in January, February and March. Despite the lighter production this winter than last, prices received by growers for truck crops, as a group, have averaged somewhat lower than either last winter or the winter before, but have been maintained at a level considerably higher than for any other year since 1923.

Early indications on acreages of 13 spring truck crops, which usually comprise 55 to 60 percent of the spring total, point to an aggregate acreage of these crops 2 percent less than in 1944 but 11 percent above the 1934–43 average. These crops are harvested principally in April, May and June.

Considering estimates made to date covering all winter truck crops and portions of the spring and summer acreages, it appears now that acreage for the entire 1945 season may be moderately less than in 1944 but well above the 10-year (1934–43) average. Production on the acreage not yet harvested will, of course, be determined by growing conditions from now until the end of the season.

TOBACCO

WITH practically all of the 1944 crop of tobacco in the hands of manufacturers and dealers, farmers are making plans for another large acreage this year. On March 1 farmers intended to plant 1,782 thousand acres, an increase of about 4.1 percent over 1944. Indications point to acreage increases for all classes of tobacco, the largest in burley, up 8 percent. If the expected acreage materializes and the 5-year (1939–43) average yields by types are obtained, total production in 1945 would be about 4 percent below 1944 and 7 percent below the record output of 1939.

The over-all production of tobacco products in this country is continuing at or near the highest level in the history of the industry. Government requirements for shipment to the armed forces overseas and for use in post exchanges in this country are being met, although supplies available for distribution through regular retail channels continue to be inadequate to meet in full the wartime requirements. The industry is still facing difficulties in expanding production, a situation which may continue to prevail as long as the war lasts.

WOOL

AS THE SHEARING of the 1945 wool clip gets under way, United States stocks appear less burdensome than a year ago. Stocks of apparel wool as of January 1, 1945, totaled about 750 million pounds (grease basis) compared with 810 million pounds a year earlier, with the carryover on April 1 likely to be still smaller relative to 1944.

Because of current large requirements for domestic wool for Army orders, a considerable part of the 400 million pounds of domestic wool on hand as of January 1 will have moved

Prices of Farm Products

Estimates of average prices received by farmers at local farm markets based on reports to the Bureau of Agricultural Economics. Average of reports covering the United States weighted according to relative importance of district and State.

	5-year average		March 15, 1944	February 15, 1945	March 15, 1945	Parity price March 15, 1945
	August 1909–July 1914	January 1935–December 1939				
Wheat (bushel)—dollars	0.884	0.837	1.46	1.47	1.48	1.53
Corn (bushel)—do	.642	.691	1.14	1.06	1.07	1.11
Oats (bushel)—do	.399	.340	.793	.733	.740	.690
Rice (bushel)—do	.813	.742	[1] 1.90	1.76	1.78	1.41
Cotton (pound)—cents	12.4	10.34	19.97	19.99	20.24	21.45
Potatoes (bushel)—dollars	.697	.717	1.37	1.65	1.71	1.25
Hay (ton)—do	11.87	8.87	16.00	17.70	18.10	20.50
Soybeans (bushel)—do	[2] .96	.954	1.89	2.10	2.13	[3] 1.66
Peanuts (pound)—cents	4.8	3.55	7.52	8.14	8.20	8.30
Apples (bushel)—dollars	.96	.90	3.07	2.53	2.54	1.66
Oranges, on tree, per box—do	[4] 1.81	1.11	1.95	2.25	2.36	2.03
Hogs (hundredweight)—do	7.27	8.38	[1] 12.90	14.00	14.00	12.60
Beef cattle (hundredweight)—do	5.42	6.56	12.00	12.10	12.30	9.38
Veal calves (hundredweight)—do	6.75	7.80	[1] 13.20	13.60	13.70	11.70
Lambs (hundredweight)—do	5.88	7.79	[1] 13.50	13.60	13.80	10.20
Butterfat (pound) [5]—cents	26.3	29.1	51.1	50.8	50.7	[6] 46.2
Milk, wholesale (100 pounds) [5]—dollars	1.60	1.81	[1] 3.26	[7] 3.31	[7] 3.24	[6] 2.73
Chickens (pound)—cents	11.4	14.9	23.8	24.5	25.0	19.7
Eggs (dozen)—do	21.5	21.7	30.1	35.8	33.1	[6] 31.2
Wool (pound)—do	18.3	23.8	[1] 40.4	40.4	39.9	31.7

[1] Revised.
[2] Comparable base price, August 1900–July 1914.
[3] Comparable price computed under sec. 3 (b) Price Control Act.
[4] Comparable base price, August 1919–July 1929.
[5] Does not include dairy production payments made directly to farmers by county AAA offices.
[6] Adjusted for seasonability.
[7] Preliminary.

into consumption before the 1945 clip is available for mill use in the late spring. Mill use of domestic wool probably will decline, however, after current military requirements are filled. More than three-fourths of the stock pile of foreign wool owned by the Defense Supplies Corporation has been sold during the past year.

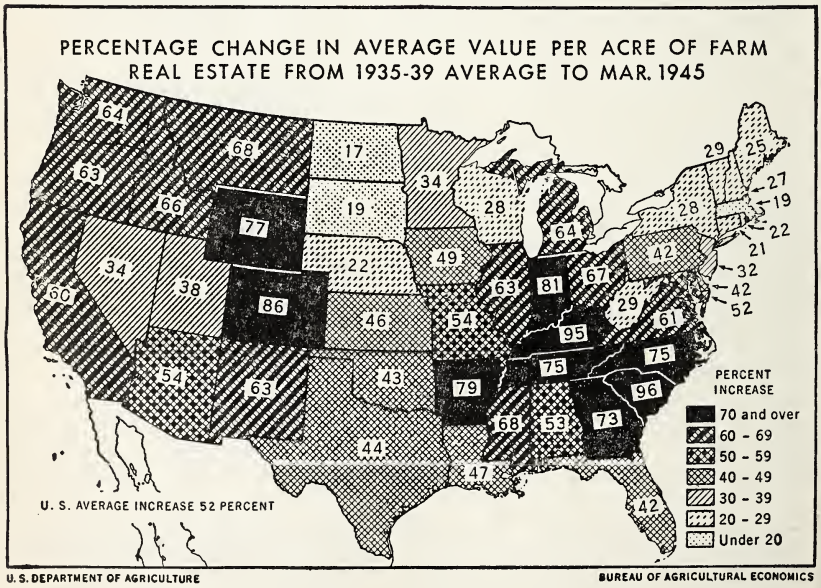
Total United States mill consumption of apparel wool in 1945 is likely to remain about at the 1944 level, an annual rate of 1 billion pounds (grease basis). Because of greatly increased Army requirements and the difficulty of increasing mill operations, the greater part of mill output for the first half of 1945 will be directed to military use. Hence a high rate of fabric production will be needed after military orders drop in order to replenish inventories of civilian goods.

With sheep numbers on January 1, 1945, down 9 percent from a year earlier, a further decline in shorn wool production is in prospect for 1945. If production declines to the same extent as sheep numbers, the 1945 clip will be about 18 percent smaller than the 1942 record clip of 392 million pounds and the smallest since 1928.

FARM LABOR

FAMILY workers this year will probably perform a much larger proportion of farm work than at any other time on record, according to March 1 reports. Although the number of family workers employed on farms as of March 1 (nearly 6,900,000) was 40,000 less than on March 1, 1944, the percentage decline was only about three-fourths of 1 percent, compared with a reduction of 6.5 percent in the number of hired workers.

Substantiating the reported scarcity of workers available for hire in rural areas, reports show only about 1,500,000 as of March 1, a decrease of over 100,000 from March 1, 1944. Increases over a year ago were recorded only in the Mountain and West South Central regions.



Farm Land-Value Rise Continues

DURING the year just past farm land values advanced at about the average rate of the last four years. Although down somewhat from 1943, the volume of sales was at a high level. Resales after a limited period of ownership continued to increase. And despite the predominance of cash sales, a significant number of farms had heavy debts as the result of sale.

Land values rose 11 percent during the 12 months ended March 1, 1945, marking the fourth consecutive year in which values have advanced at an average rate of 1 percent a month. This increase brought values for the country as a whole to a level 52 percent above the 1935–39 average. The most substantial increases during the year occurred in a number of Southern States, where the advances approximated or exceeded those of the preceding year. On the other hand, in most Midwest States rates of increases in recent months were considerably under the 1943 rates.

Sales Volume Down, Resales Up

For the country as a whole, the volume of sales for the last three quarters of 1944 was about 15 percent under the record volume of the corresponding quarters the previous year. Although the demand for farms slackened in some local areas, it remained strong in most sections of the country and the land market continued to be essentially a sellers market. The supply of farms available for sale was more restricted because of fewer offerings reflecting the depletion of "unwilling" owner holdings and the desire of more owners to retain their properties unless unusually attractive offers are made. This reduced supply condition appears to be the principal explanation for the decline in the volume of sales.

Marked increases in the volume of reselling after a limited period after purchase are reported in a number of regions. In selected counties in the Far West, about one-fourth of all farms sold in the fourth quarter of 1944 had been held less than 2 years. For selected counties throughout the United States resales accounted for 13 percent of all sales during the last half of 1944, compared with 11 percent during the first half. About two-thirds of such resales were held less than one year and average gross profits in most regions ranged from 20 to 40 percent of the initial purchase price.

To Curb Inflationary Advances

Current and potential developments in the land market appear to justify the serious attention being given by farm organizations, agricultural college groups, Government officials and others to the problem of inflation in real estate and other capital assets. In its report of October 1944, the Land Grant College Committee on Postwar Agricultural Policy recommended a number of steps to curb excessive increases in farm land prices. The North Central Regional Committee on Land Tenure Research issued a report in March 1945, dealing exclusively with the various phases of the problem of preventing land price inflation.

Possible lines of action that have been considered as means of avoiding excessive land-value increases are: (1) various educational and voluntary measures, (2) indirect control measures, such as revisions in the treatment accorded capital gains in the present revenue code, and (3) the more direct types of Government regulation involving curbs on land speculation mortgage credit controls, price ceilings and purchase permits.

Of the direct Government controls, those designed to strike principally at short-term speculation have received the most attention. The various antispeculation measures all attempt to discourage speculation by drasti-

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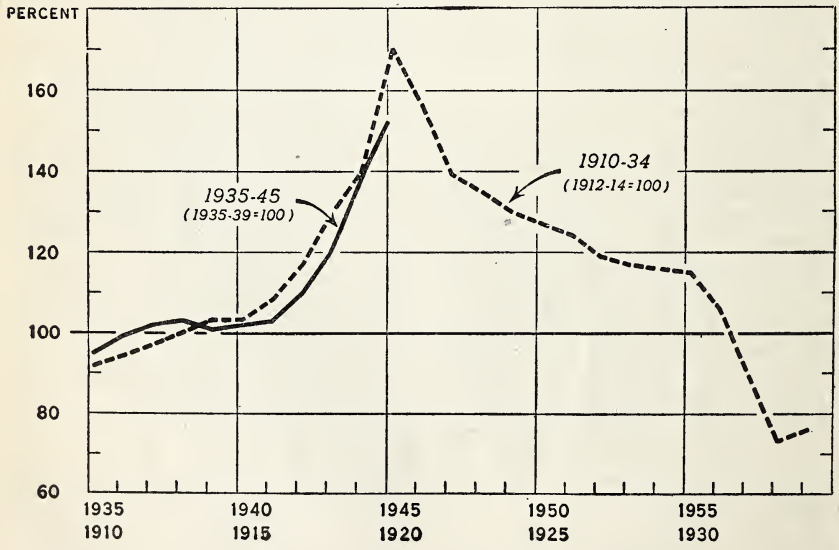
cally limiting the net profit incentive from resale of properties after short periods of ownership. Transactions considered most likely to be speculative are segregated by limiting the application of proposals to resale, within a given period, of property acquired after a specified date; and the profit incentive is removed either by taxing away most of any gain that may arise or by preventing the accrual of gain through price ceilings on resales.

Controlling Speculative Profits

Measures of this type would be expected to virtually eliminate the speculative profit motive as a factor in the demand for land. Not only would buyers interested primarily in resale profit possibilities withdraw from the market, but the prices offered by investors and farm operators would also be lowered somewhat because of the limited value that would be attached to possibilities for realizing capital gains. As a result, the bids for land would be more nearly dependent upon expected earning capacity and other considerations such as security of principal.

Because such measures would not apply to first transfers, their initial effect upon the supply of land offered for sale would be quite limited in comparison with the expected reduction in demand. To the extent that present holders awaiting peak price levels considered such measures as effective means of curbing further price advances, the supply of farms offered from this source might actually increase. However, the longer a measure of this type were in effect, the larger would be the number of farms covered by restrictions. Such farms probably would not be offered for sale readily. In case income from alternative investments were lower, most owners of property subject to regulation would be unwilling to accept tax-reduced or ceiling-limited net proceeds. However, the cumulative supply restricting-influence of such measures would be materially reduced by provisions for the release of properties from coverage after they had been

FARM REAL ESTATE: COMPARISON OF INDICES OF AVERAGE VALUE PER ACRE, 1910-34 (1912-14=100) AND 1935-45 (1935-39=100)



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held a sufficient period to qualify as "nonspeculative." In a tax approach this could be accomplished by a tax rate that would decline the longer the property was held. In a resale price ceiling measure, either a limitation of the time-period during which the ceiling would operate, or annual percentage increases in ceiling prices, would accomplish a similar purpose.

Even if no release provisions of the type indicated were in effect, several years would probably be required before the supply of farms would be materially restricted. Because such control proposals are considered as war-period emergency measures, the chances are the emergency would be over long before the supply-restricting influence even began to approach the demand-restricting effect.

Benefits of Control Measures

Control measures aimed primarily at speculative motives have appeal for a number of reasons. From the viewpoint of general welfare, activities of a speculative nature are usually considered to have negative social value. Such activities aggravate the problems of bona fide farmers, investors, and lenders—groups whose activities would not be adversely affected by measures of the type indicated. In addition, the problems of administering such measures would be considerably easier than most other types of reasonably effective controls. Although some loopholes and borderline cases would be inevitable, for the most part the properties subject to control and the bases for control would be rather clear cut.

Even if speculative elements in the land market were virtually eliminated, the question remains as to whether or not this alone would be sufficient to prevent further excessive increases in value. As long as farm incomes remain at high levels, the chances are that pressure of demand for operation and investment would still cause values to advance. Profit taxes or price ceilings on resales, however, would materially reduce the rate of advance and should definitely prevent purely speculative activity from becoming rampant in any area. If combined with an intensive educational program, and possibly some control over credit, measures for curbing resale profits should aid materially in obtaining greater land value stability.

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More Protein Hays to Meet Feed Needs

INCREASES in the protein content of the tame hay supply and in per acre yields since 1925 have contributed very directly to the Nation's wartime food output. Roughage-consuming livestock are eating more hay of better quality than ever before, yet the acreage devoted to tame hay production is nearly 18 million less than would have been necessary if these improvements had not taken place. Technological advance has, in effect, released these acres for higher priority war crops.

The average annual quantity of hay available during 1940–44 contained about 1.6 million more tons of digestible protein than that of the 1925–29 period, and a ton of average hay contained about 142 pounds as contrasted with 124 pounds in the earlier period, an increase of 18 pounds per ton. Thus if we had not shifted to the production of more of the

NOTE.—This article is a summary of a more detailed report *Changes in Hay Production in War and Peace,* by the author, which was recently issued by BAE.—Editor.

improved legume hays since 1925–29, about 18 million additional acres would have been needed to provide the same quantity of digestible protein available in the 1940–44 hay supply. At the same time, the average yield of all hay—including wild hay—during 1925–29 was 1.22 tons contrasted with 1.32 tons per acre during the past five years. Considering productivity alone, 6 million additional acres of hay would have been required to obtain the 96 million ton production averaged in 1940–44 if the 1925–29 yield level had prevailed.

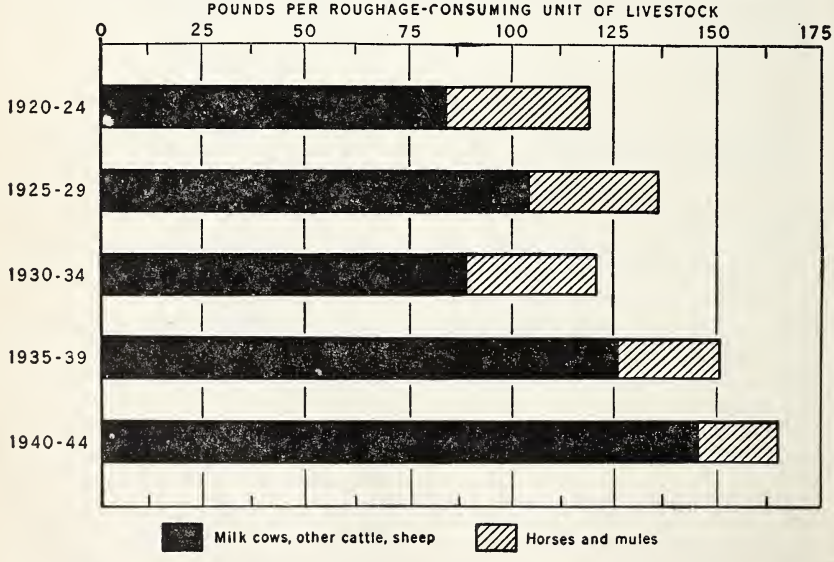
Shift to Better Hays

Of greatest significance in hay production trends is the pronounced tendency toward displacing lower-yielding, poorer-quality grass hays with more nutritious, higher-yielding legumes. This trend, already apparent in the thirties, has been accelerated during the war and may be expected to continue in future years. Wartime restrictions have slowed possible expansions in hay acreage which have stimulated more intensive production on the acreage available. Likewise, the larger livestock numbers together with the difficulties of transporting feed grains to deficit feed areas have renewed emphasis on the need for as much local forage production as possible.

Twenty years ago nearly 60 percent of the country's tame hay acreage was reported as "clover and timothy" hay. This included timothy, or clovers, or mixtures of the two. But now these hays represent only a third of the tame-hay acreage. Displacement of timothy through the years by the higher yielding, more nutritious legume hays such as alfalfa, red clover and lespedeza has been of great influence in improving the Nation's supply of high quality forage.

The acreage devoted to the principal legume hays reported separately—alfalfa, lespedeza, sweetclover, soybean hay, peanut vine, and cowpea hay—has increased from about 30 percent of the total tame hay acreage in 1925–29 to nearly 50 percent in the 1940–44 period. In addition, many experts think that in recent years about a third of the acreage reported as "clover and timothy" probably consists of red

DIGESTIBLE PROTEIN AVAILABLE IN ALL HAY, UNITED STATES, 1920-44



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clover. Thus as much as 60 percent of the country's tame hay acreage may now be legume hays, contrasted with only 35 to 40 percent twenty years ago.

Comparisons on a production basis are even more significant when considering the national hay supply. The production of the principal legume hays reported separately has increased from about a third of the total tame hay produced in 1925–29 to well over half in the 1940–44 period. Making rough allowance for the red clover in "clover and timothy," it seems probable that two-thirds of all tame hay produced during the past 5 years is leguminous hay as contrasted with 40 to 45 percent twenty years earlier.

Importance of Shift to Legumes

Part of the importance in this widespread shift to legume hays is, of course, the increased total production of tame hay made possible by the shift. Part of the importance of the shift is the dual use made of the legumes for livestock feed as well as for soil erosion control and building up the fertility of poorer soils. The shift is likewise of great importance in that it has kept pace with changes in the country's livestock pattern during the past 20 years.

Of the 85.8 million roughage-consuming livestock units during the 1920–24 period, 24.5 million were horses and mules, and 61.3 million were milk cows, other cattle and sheep. Of the 83.2 million roughage-consuming livestock units during the 1940–44 period, only 13.7 million were horses and mules, while 69.5 million were milk cows, other cattle and sheep. In other words, the percentage of horses and mules dropped from 29 percent in the first period to 16 percent in 1940–44, with a corresponding increase in the percentage of milk cows, other cattle and sheep.

The change in the pattern of livestock numbers plus the shift from timothy to the leguminous hays of superior protein content means that roughage-consuming, livestock, after deducting the quantity fed horses and mules, now have available about 540 more pounds of hay per unit than 20 years ago. And more important, during the same period the pounds of protein available per unit of roughage-consuming livestock, exclusive of that fed horses and mules, have increased 74 percent, from 84 pounds in the 1920–24 period to 146 pounds during the past five years. The digestible protein content of the legume hays range from 8 to 12 percent, contrasted with 2 to 6 percent for hay made from the common grasses and grains.

The significance of this change becomes apparent when it is realized that milk cows, other cattle, and sheep require much more protein than do horses and mules whose energy is transformed into farm power rather than milk, meat and wool—products containing much protein. For example, the average protein requirement of a mature 1,000 pound horse at medium work is only about 70 percent of that of a mature dairy cow of the same weight and producing 20 pounds of milk per day. And a 1,000 pound fattening steer requires even more protein than the cow. Further, growing animals need much more protein than do mature livestock and currently, there are a great many more young cattle and sheep than young horses and mules.

A Look Ahead

With the return of peace it is reasonable to expect larger quantities of fertilizers at prices that will permit their use to a greater extent on hay and pasture lands. Relaxing of war time pressures for production of crops for direct human consumption will turn the country's thinking to ways of increasing the consumption of mills, meat and other livestock products. This will be in line with good nutrition and the habits of American consumers. The return of large acreages of the present cropland to hay and pasture to meet this need will likewise be in

the interest of soil conservation and good land use—restoring depleted fertility reserves and maintaining and increasing soil resources for the use of future generations or for possible future emergencies.

Efforts should be focused on a better balanced forage supply adequate for every season of the year in each local area. This means not only giving attention to the improvement of hay—even at a faster rate than during the past 20 years—but also exploring the possibilities to obtain more feed from permanent, rotation, and temporary pastures; from grass and legume silage; and from crop aftermath. Vigorous attention to all these phases of the Nation's future forage supply should be reflected in more and cheaper livestock products, better nutrition, sustained crop production and soil fertility, and a more nearly balanced agriculture.

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Concentrate Rations Fed Milk Cows

DURING the war marked changes in the make-up and cost of concentrate rations fed to milk cows have taken place as farmers stepped up rates of concentrate feeding to stimulate greater milk production. Beset by difficulties in obtaining high protein feeds and a limited supply of feed grains to support increased livestock numbers, dairymen have changed the composition of rations to include more commercial mixed dairy feeds and more wheat than in former years. Producers have been buying more of the concentrates fed and producing less on their home farms. Costs of rations have been forced upward by higher prices of grains, millfeeds, and concentrates, and incentive payment programs have been developed to encourage feeding for heavy milk production.

Over a period of 14 years the U. S. Crop Reporting Service has collected information from dairymen on the kinds of concentrated feeds supplied to milk cows and on the value per 100 pounds of the concentrate ration. Feeding practices in herds kept by these 6,000 special dairy reporters is believed to be reasonably representative of the 2 million farms from which milk or cream is sold. The records provide a factual background for comparing the composition and cost of wartime rations with those of earlier periods. A study of the changes is not only helpful for appraising the wartime feeding problems of milk producers, but is also significant from the standpoint of Government policy during the remainder of the war, and readjustment problems that will be faced by dairymen in the postwar period.

Farmers normally draw from a wide variety of grains, seeds, oilmeals, millfeeds, and commercial mixes in obtaining the concentrate rations fed to milk cows. Feeds used differ markedly between regions according to the kind of concentrates produced or available and the type of roughage fed. Relative prices of similar feeds, importance of the dairy enterprise in relation to other farm operations, intensity of milk production practices, and other economic considerations, cause wide divergence in the kinds of feed used. Broken ear corn may be the only concentrate fed to milk cows on some Midwestern farms where dual-purpose type cows are milked, whereas producers in the highly specialized fluid milk areas of the East

may feed a commercially prepared mixture containing more than a dozen different ingredients.

In the 1938–40 period prior to the war, corn was the most used feed in concentrate rations fed by dairy reporters, making up 28.8 percent of the total. Oats followed with 24.1 percent, while other important farm-grown grains included barley with 8.2 percent and wheat with 1.7 percent. Purchased wheat millfeeds, mostly bran, were included to the extent of 6.2 percent. Among the group of high protein feeds used by farmers to balance home-mixed concentrate rations, cottonseed meal, with 3.2 percent of the total, was the most important. Soybeans or soybean meal made up 2.7 percent, gluten feed or meal 1.2 percent, unprocessed cottonseed fed mainly to small herds in the South 1.0 percent, and linseed meal 0.7 percent. Miscellaneous feeds not listed separately, including grain sorghum, beet pulp and distillers' or brewers' grains, accounted for 5.3 percent. Commercial mixtures, prepared by mills or feed dealers from much the same ingredients but bought and used by farmers as a single feed, made up 16.9 percent of the total.

More Wheat and Commercial Mixes

Changes in rations caused by war conditions did not develop immediately during the first year of hostilities, but became apparent by the fall of 1943 when larger numbers of livestock on farms resulted in reduced feed supplies per animal unit. Use of wheat, normally limited by its high cost relative to feed grains, increased greatly when the Feed Wheat Program made large quantities available for feeding purposes at a price below the market level. On November 1, 1943, wheat made up 6.2 percent of the total ration fed in dairy reporters' herds, some four times the prewar proportion and higher than in any fall since 1931. Compared with the 1938–40 period the percentage of commercial mixed dairy feeds in the ration increased by half, and on November 1, 1943, represented more than one-fourth of all concentrates fed to milk cows. Much of this increase was the result of difficulties in obtaining proper supplements for balancing farm-mixed rations. Also, under higher levels of concentrate prices, the charges for transportation, mixing, and handling incidental to commercial dairy feeds represented a smaller proportion of the total cost, and thus did not discourage the use of commercial mixed feeds so much as during periods of low price.

Farmers used smaller proportions of high protein supplements, wheat millfeeds, oats, and barley in wartime rations fed to milk cows. On November 1, 1943, oil seeds, oilmeals, and gluten as a group represented only 5.7 percent of the total concentrates, the smallest percentage in 14 years of record and less than two-thirds the proportion used in the 1938–40 period. The percentage of cottonseed meal in the ration dropped more than two-fifths, soybeans and soybean meal by one-third, and gluten and unprocessed cottonseed by more than half. Linseed meal while representing a larger proportion of the ration than in the 1938–40 period was down considerably from the percentage used in fall months of 1941 and 1942. Importance of wheat millfeeds, mainly bran which is a medium protein feed prized especially by some feeders for increasing bulk and palatability of home-mixed concentrate rations, has been gradually decreasing for a number of years. In the fall of 1943, it amounted to only 4.4 percent of the total as compared with 6.2 percent in the pre-war period.

Changes Reflect Relative Prices

Reduced proportions of oats and barley in concentrate rations fed to milk cows in late 1943 appear to reflect the high cost of these grains in comparison with corn and wheat. Prices received by farmers for oats, unrestricted by ceilings, advanced from 84 cents per hundred pounds in mid-

October of the 1938–40 period to $2.33 per hundred pounds in October 1943, a gain of 177 percent. Barley prices advanced 165 percent in the same period. Meanwhile, October prices of corn, under control of an OPA ceiling, increased only 115 percent between the 1938–40 period and 1943. During part of 1943, wheat, made available for feeding purposes at a substantially reduced price, was cheaper per pound than the major feed grains.

In 1944, some shifts back toward prewar composition of concentrate rations fed to milk cows took place. Desired concentrates were more easily obtained as the result of larger supplies available per animal unit and the feed allocation programs of the War Food Administration. On November 1, 1944, the use of wheat, at 3.3 percent of the total ration, was only half as great as a year earlier. Oil seeds, oilmeals, and gluten as a group regained almost their prewar importance, but marked changes were still apparent for some of the individual feeds included. On November 1, 1944, soybeans and soybean meal were by a considerable extent the most important protein supplement, replacing cottonseed products in that role. Farmers continued to use commercial mixed feed to a much greater extent than in the prewar period, with the percentage of total ration on November 1 about the same in 1944 as in 1943.

Less Home-Grown Feed Used

Home-grown feeds as percentage of the total November 1 concentrate ration dropped from 55.3 percent in the 1938–40 period to 48.7 percent in 1943. Greater dependence on commercial mixes was a factor, but the purchase of some kinds of farm-grown feeds also increased. On November 1, 1943, only 30 percent of the wheat used in concentrate rations was home-grown, a marked drop from the 80 percent in the 1938–40 period. The proportion of barley grown on the farm where fed declined from 75 to 70 percent, while corn and oats were unchanged at about 85 percent. In late 1944, dairymen increased the use of home-grown feeds to 50 percent of the concentrate rations fed their milk cows, moderately less than in the prewar period and midway between the 60 percent typical in the depression

Table 1.—Feeds Used in Concentrate Rations Fed to Milk Cows, in Herds Kept by Dairy Reporters, United States, 1938–40 Average and 1941 to 1944

Feed group	1938–40 Nov. 1	1941 Nov. 1	1942 Nov. 1	1943 Nov. 1	1944	
					May 1	Nov. 1
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Corn	28.8	30.1	28.5	29.8	32.1	29.1
Oats	24.1	24.1	23.4	18.5	16.6	20.1
Barley	8.2	8.7	8.3	5.5	4.1	5.0
Wheat	1.7	1.6	3.1	6.2	3.3	3.3
Cottonseed meal	3.2	2.3	2.9	1.8	2.0	2.1
Cottonseed	1.0	.7	.5	.4	.6	.5
Linseed meal	.7	1.9	1.9	1.2	1.8	1.8
Soybeans or soybean meal	2.7	1.9	2.0	1.8	3.2	3.4
Gluten feed or meal	1.2	1.3	1.3	.5	.7	.7
Wheat bran, shorts	6.2	3.8	3.5	4.4	4.2	.44
Commercial mixed dairy feed [1]	16.9	19.7	19.2	25.7	28.0	25.8
Misc. Other	5.3	3.9	5.4	4.2	3.4	3.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Home-grown feeds as percentage of total	55.3	56.5	54.7	48.7	46.1	50.0

[1] In 1940 commercial mixers prepared dairy feeds from the following ingredients: Corn, 7%; other grains, 8%; wheat millfeeds, 14%; corn millfeeds, 11%; other grain byproducts, 9%; oilseed meals, 23%; molasses products, 10%; distillers' and brewers' grains 6%; alfalfa meal, 7%; and miscellaneous, 5%. Data for other years are not available.

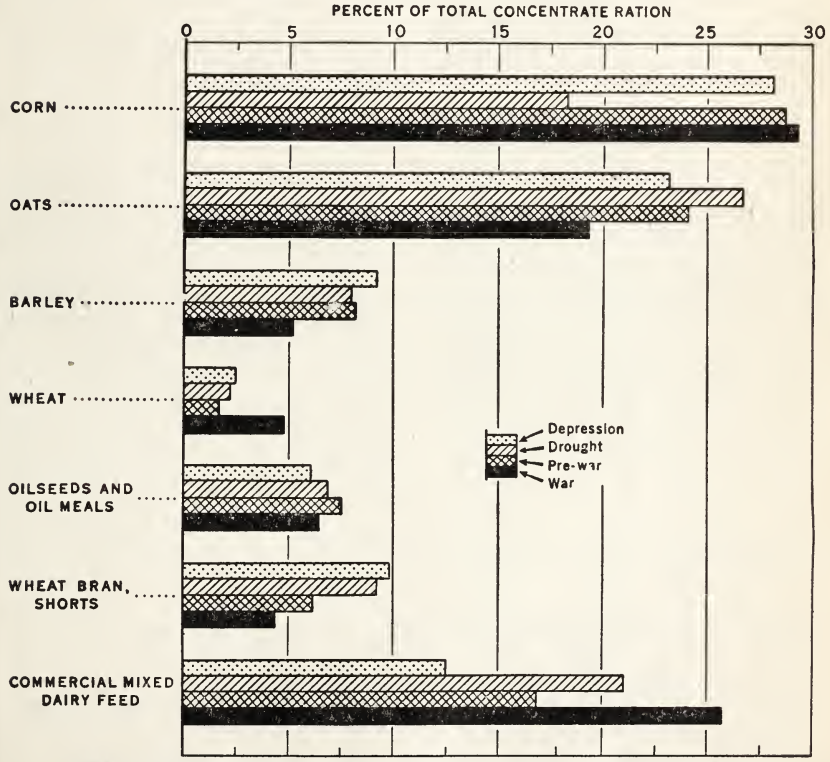
period of the early 1930's and the 40 percent characteristic of major drought years.

Determination of costs of concentrate rations is complicated by shifts in kinds of feeds used. In order to measure changes actually taking place, milk producers have been asked to report the value per 100 pounds of concentrate rations fed to their own milking herds periodically since 1931. These values represent the farmers' costs of such combination of purchased and home-grown feeds as was included in the concentrate ration actually fed. Purchased feeds were valued at prices paid, and home-grown feeds at prices they would bring on the local market. On the basis of the reported value figures and prices of the important concentrates usually included in milk cow rations, a monthly series of concentrate values has been prepared by the Bureau of Agricultural Economics. This series provides a measure of the dollar value per hundred pounds of concentrate rations actually being fed by farmers, which, of course, is not a ration of constant composition nor necessarily of uniform or balanced nutrient content.

Concentrate Costs Double

The value per one hundred pounds of the concentrate ration fed to milk cows has more than doubled during the war period. The upward trend was somewhat irregular and interrupted

RELATIVE USE OF CERTAIN FEEDS IN FALL CONCENTRATE RATIONS FED TO MILK COWS, UNITED STATES, SELECTED PERIODS*



*AS REPORTED BY DAIRY CORRESPONDENTS. SELECTED PERIODS ARE AS FOLLOWS: DEPRESSION, OCTOBER 1, 1932-33; DROUGHT, OCTOBER 1, 1935-37; PRE-WAR, NOVEMBER 1, 1938-40; AND WAR, NOVEMBER 1, 1943-44

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occasionally by short periods of decline. In the 1938–40 period preceding the war, the United States average value was $1.26 per hundred pounds, about one-sixth less than the 1922–41 long-time average, but almost one-half more than in 1932. During 1941 and the first quarter of 1942, the cost of concentrates advanced sharply. In the latter part of 1942, there was some decline under the influence of a large feed crop. Through 1943, the sharp uptrend in concentrate values was again in evidence, and continued at a somewhat moderated rate through the first half of 1944. In later months of that year concentrate cost dropped, with a decline of about 20 cents per one hundred pounds taking place between July and November. For the entire year of 1944, the value of concentrate rations fed to milk cows averaged $2.61 per one hundred pounds, more than twice that in the 1938–40 period, but still 11 percent less than in the peak year 1920.

The value of grain and concentrates fed to milk cows in various parts of the country in 1944 ranged from less than $2.00 per hundred pounds in a small section of the Western Corn Belt up to more than $3.00 in extended coastal areas. In the Midwest, concentrates for milk cows are drawn mainly from large supplies of home-grown grain and are often fed with a minimum of grinding or other preparation. The high cost of rations in coastal areas reflects expenses of transporting grains and feedstuffs from surplus to deficit areas, handling charges incidental to purchased feeds, costs of commercial mixing, and the higher protein content of rations usually fed. The regional variation in costs are important not only insofar as the region itself is concerned, but also because they are reflected in the national average costs for producers of different types of dairy products.

Between the 1938–40 period and 1944 the increase in value of concentrate rations in dollars per hundred pounds was greatest in the South. Both the South Atlantic and South Central Regions showed gains of more than $1.50 per one hundred pounds as compared with less than $1.20 in the West North Central Region where the smallest increase occurred. On a percentage basis greatest increases were evident in the central part of the country where all three major regions showed gains of 114 percent or more, compared with 84 percent in the North Atlantic Region and 99 percent in the South Atlantic Region. National average values of concentrate rations fed in milk-selling areas and in cream-selling areas are shown in table 2.

Prospects for Next Few Years

With prices for most major feeds now under price ceilings and feed supplies ample at least for the present, it appears unlikely that the value per hundred pounds of concentrate rations will continue the rapid advance of the past four years. In appraising the influence of present concentrate costs on the economic status of milk producers it is important to recognize that the percentage increase in feed prices has been greater than for milk and butterfat prices. It is only through the medium of dairy production payments direct to farmers that price relationships during the past

Table 2.—Value per 100 Pounds of Concentrate Rations Fed to Milk Cows, United States, 1938–40 Average and 1941 to 1944

	1938–40	1941	1942	1943	1944
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*
In milk-selling areas	1.36	1.58	1.96	2.39	2.74
In cream-selling areas	1.11	1.30	1.66	2.09	2.39
Combined milk and cream	1.26	1.48	1.85	2.28	2.61

year have been such as to encourage a record rate of feeding. Thus price relationships between dairy products and concentrate costs that influence feeding rates will center around future Government price control and subsidy programs.

The make-up of concentrate rations fed to milk cows during the remainder of the war and in the postwar period will depend largely upon the production of various feeds and upon levels of prices. The increased use of commercial mixed dairy feed appears likely to persist as long as war needs place a premium upon intensive production practices. Further shifts in this direction do not seem likely to be great, unless appreciable shortages of ingredients for the mixing of rations on farms again develop. Continued good crops and a lower level of feed prices in the post-war period would probably result in greater dependence by farmers upon home-prepared rations. The use of some feeds such as soybean meal, appears certain to continue greater than in pre-war years. The degree of increase, however, will depend on the extent to which wartime gains in production are carried over and on supplies of such competing feeds as linseed meal and cottonseed meal. Wheat probably will be used to only a limited extent in milk cow rations unless excessively heavy supplies or special Government programs reduce its cost for feed purposes to a level comparable with major feed grains.

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Fruit Production Prospects for 1945

TOTAL tonnage of all fruit production in 1945, with average weather, is now expected to be about a tenth less than in 1944—when citrus output was a record high and deciduous was the largest since 1937—but about a tenth more than in 1943. Citrus production this year is expected to be about a tenth less than in 1944 largely because of severe hurricane damage in Florida last October. Deciduous fruits, especially in the Eastern and Central States, have generally produced large and small crops in alternate years. Production was large in 1944 and so an aggregate tonnage about a tenth less than harvested last year may be expected this year, if growing conditions are about average.

These appraisals of probable fruit production in 1945 are more reliable for citrus than for deciduous crops. Citrus crops from the bloom of the spring of 1944 are marketed between October 1944 and November 1945 and there is little likelihood of extensive enough frost, wind, or hurricane losses between now and the completion of harvest to materially reduce prospective tonnage.

Most deciduous fruits, on the other hand, have not yet bloomed and are still subject to many weather hazards such as spring freezes and summer

This appraisal of fruit prospects was written before the arrival of the unseasonably warm weather in March which brought on very early blooms in most of the fruit areas. The danger of frost was not past by the first of April so that freezing temperatures this month would reduce crop prospects considerably below this appraisal.—Editor.

drought, which may materially reduce production below early season prospects. Although 1944 production was reduced to some extent by spring freezes in the Southern States, hail in California, drought and severe insect damage in the mid-west and the Appalachian area, for the country as a whole the season was unusually favorable so that total output was greater than expected before maturity of the crops. These preliminary statements for 1945 assume conditions for fruit production will not be as favorable as in 1944 and that the usual pattern of alternate years of large and small production will prevail.

Factors Affecting Yields

Even though weather is by far the most important and least predictable factor affecting fruit production, many other factors have an important influence on the size and quality of fruit crops every year. Good cultural practices, adequate supplies of labor, machinery, spray materials and other supplies, combined with competent management, are all essential to successful production of large, high-quality fruit crops. For the past several seasons growers have produced fruit under difficult conditions. Wartime shortages have necessitated many make-shift operations and the use of much unskilled labor, especially at harvest time. Leading cost factors such as labor and packages have risen sharply the past few years, but prices received for most fruits have been relatively favorable. The price index of all fruits combined for the 6 months September 1944 to February 1945 averaged about 2½ times the average for the 5 years, 1935–39.

The price outlook for fruits in 1945 seems favorable. Many growers undoubtedly will have difficulty coping with one or more of the important factors of production. Difficulties in transporting production materials to the farm as well as fruit from the farm to market are expected to be greater than last year. Hence it seems advisable to obtain spray materials, packages, and needed new machinery as early in the season as possible. Labor supplies will probably not be any better than last year.

Apples

The 1945 crop of apples—the most important deciduous crop, and of all fruits second only to oranges in total tonnage—is likely to be smaller than in 1944. If history repeats itself—areas having large crops last year would be followed by somewhat smaller crops this year—one might expect a 1945 output from 5 to 10 percent less than the 1944 harvest.

During the last 36 years small crops of apples have followed large crops 9 times and large crops have followed large crops 4 times. These alternate bearing characteristics are most pronounced in the North Atlantic, South Atlantic, and Central States apple areas, and occur less frequently in the Western States where the bulk of the crop is produced in irrigated sections. In 1944, between 3 and 4 million bushels were blown off trees along the Atlantic Seaboard by the mid-September hurricane, but the bulk of these apples were salvaged for fresh fruit and processing. Drought and insects reduced quality and sizes in the Shenandoah-Appalachian region. In spite of these hazards, relatively large crops were produced in 1944 and as large or larger crops might be raised in 1945 in the South and North Atlantic regions, but the most likely expectation for these regions is a smaller production than last year.

In the Central States, drought and an unusually severe infestation of codling moth cut sharply the size and quality of the 1944 apple crop. Conditions were least favorable for apple production in Missouri and Illinois. This Central States region had a medium-sized crop last year and under average conditions might be expected to produce as large or a larger production in 1945. In the Western region conditions were unusually favorable

last year and the crop was the largest since 1938. A smaller production than in 1944 seems a reasonable expectation for this season.

Grapes

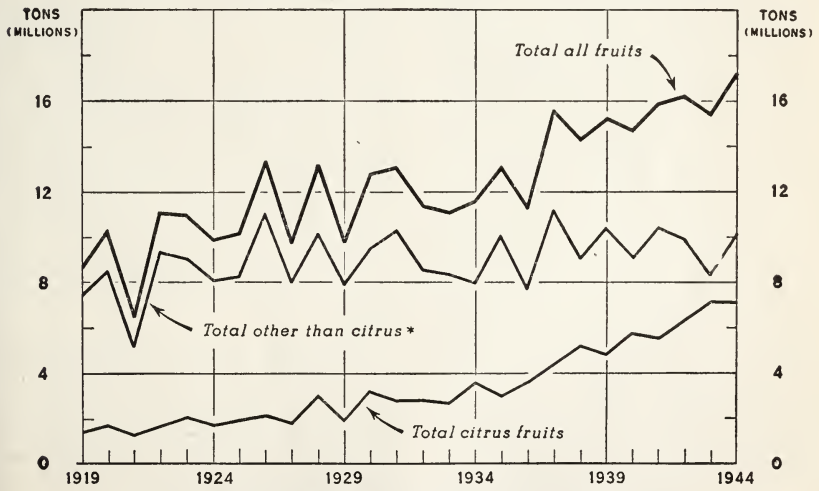
Second to apples in total tonnage of deciduous fruit, the 1945 grape crop is likely to be about the same size as in 1944, assuming average growing conditions. Approximately 90 percent of the country's grape crop is produced in California. In 1943, the California crop was a record high followed by a 15 percent smaller crop in 1944. Although the bearing acreage has stayed about constant during the past 10 years, per acre yields and total California production have increased and are now about a third above the levels of the midthirties. Better care and increased applications of fertilizer have stimulated production in recent years. Prices received by California farmers for the 4 most recent crops averaged about 3 times the average prices received for the 6 crops from 1930 to 1935. Low prices in the late twenties and early thirties resulted in many growers reducing acreage and others abandoning grape growing.

In Washington, large plantings in the late thirties accompanied by good care resulted in a sharp upward trend in production. Bearing capacity is now about 3 times that of 10 years ago. Both American and European type grapes are grown in Washington. In the predominantly Concord type territory of the Eastern States the production trend has been downward, with bearing capacity of vineyards now about three-fourths that of 15 years ago.

Peaches

Peach production varies widely from year to year—the change in size of the United States crop being largely dependent upon the incidence of winter damage and spring frosts in the Eastern and Southern States. In the spring of 1944, freezing temperatures materially reduced early bumper crop prospects in the Southern States. However, conditions the rest of the season were comparatively favorable and the southern area produced a better than average crop. Bearing capacity is increasing in this section, the result of large plantings in the late thirties. Above-average crops were

FRUIT PRODUCTION: UNITED STATES, 1919-44



* INCLUDES APPLES, PEACHES, PEARS, GRAPES, CHERRIES, PLUMS, PRUNES, APRICOTS, FIGS, OLIVES, PINEAPPLES, AVOCADOS, CRANBERRIES, DATES, PERSIMMONS, AND POMEGRANATES

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produced in 1944 in the Northeastern and North Central regions. Production trends appear about stationary in the Northeast but bearing surface is increasing moderately in the Central States due largely to plantings in Michigan in the late thirties. In the Western States, excluding California, the trend of production has been upward for several years. Bearing capacity of orchards in this region is now about one-half to two-thirds greater than 15 years ago.

United States peach production, excluding California, in the last 5 years has varied from 52,000,000 bushels in 1941 and 42,000,000 in 1944 to 17,000,000 in 1943. While a production as large as the bumper crop in 1941 or even larger is entirely possible in 1945, especially considering the increased bearing surface, large crops are seldom followed by large crops. Judging by the past, the most reasonable expectation would be a 1945 crop no larger and probably not so large as the 1944 harvest in the area which furnishes the bulk of the summer and fall peaches for the Nation's fresh markets. However, the production trend is expected to be moderately upward for the next few years. A scarcity of nursery stock has prevented many from increasing their plantings the last few years.

California—the country's leading peach State—produced 40 percent of the United States total in the 10 years 1933–42. The bulk of the California crop—80 percent of the total in the 1933–42 period—is grown for processing. Clingstones are utilized mainly for canning and Freestones for drying, although important quantities of Freestones are marketed fresh and canned, and small quantities of Clingstones are dried and marketed fresh in most years. The 1944 California crop was the largest since 1930 and the second largest of record. The trend of bearing acreage has been moderately upward since 1941 and is expected to continue so for several years due to plantings in the late thirties and early forties.

Production evels and potential bearing surface are now about a fifth above those of the mid-thirties. Many trees were pulled and some orchards abandoned following the low prices of the early thirties. Favorable prices, improved varieties, better care, increased fertilizer applications, and a higher proportion of the trees on more favorable soils and better adapted locations, have all contributed to a large increase in the average production per bearing acre. California peach orchards have been well cared for and conditions are favorable for good sized crops in 1945, but production of both Freestone and Clingstone varieties are not expected to be as great as the very large 1944 crops.

Prunes and Plums

Prunes—produced almost entirely on the Pacific Coast—have declined moderately in production and bearing surface since the late thirties. About three-fourths of the crop is utilized for drying most years, with about 90 percent of the dried prunes produced in California. Plantings have been small for several years, many trees are old, and production levels the next few years are expected to continue to decline moderately.

Plums—with nearly all of the crop marketed as fresh fruit—have increased in production steadily since the mid-thirties. The California acreage has declined during this period but per acre yields have increased due to the removal of trees in low yielding areas and the coming into bearing of new plantings in more favorable locations. Plum production may continue to increase moderately the next few years if prices continue favorable.

Pears

The trend of pear production was upward until the middle thirties and since then has been about stationary, with level of production now about double that of the early twenties. The Pacific Coast States now produce about 70 percent of the country's production and about 75 percent of

the pears grown and sold fresh or processed. In 1944 the Northwest (Washington and Oregon) produced a record large crop and California had about an average production although about 20 percent below the record large 1943 crop. A 1945 production in the Pacific Coast States about as large as in 1944 seems likely under average growing conditions. In the Eastern and Central States above-average pear production in 1944 followed near-failure crops in 1943. For this area as a whole this year's production probably will not be quite as large as last year's.

Apricots

A record large crop of apricots was produced in 1944. Over 90 percent of the production was in California where the 1943 crop was about 40 percent of average and less than one-fourth of the 1944 production in that State. United States production in 1945 is likely to be about a third less than in 1944 if the usual tendency prevails for very large California crops to be followed by considerably smaller crops. The trend of production in Washington has been upward for several years but if growing conditions are about average the 1945 crop is not expected to be as large as the record high in 1944.

Cherries

A record large crop of cherries was produced in 1944 with production of the sour varieties in the Great Lakes region accounting for most of the above-average production. Such a combination of unusually favorable conditions—freedom from late spring frosts, good pollination weather, and a heavy set with good sizes—is less likely to be repeated in 1945. Average production or about three-fourths as large a crop of sours" this year as last is the best expectation.

Production of sweet varieties varies less than "sours" from year to year. About four-fifths of the United States sweet cherry crop is grown in the Pacific Coast States where production hazards are not so great as in the Great Lakes region. Production of sweet cherries increased steadily until the late thirties and the trend appears to be about stabilized with the peak of production probably having been reached in California. Peak production probably will be reached in a few years in the Northwest. A production in 1945 about the same or slightly less than in 1944 seems most likely under average growing conditions.

Prospects in Years Ahead

Production of all fruits has increased sharply in the past 25 years and especially since the middle thirties. Total fruit supplies in the calendar year 1944 were about 80 percent greater than in 1919–23 and about 45 percent above the average production from 1933–37. Most of this increase has been in the citrus crops, production in 1944 of all citrus combined being over 4 times the 1919–23 average and more than twice the 1933–37 average. Deciduous fruit production in 1944 was about 14 percent greater than in 1933–37. The marked upward trend in citrus production is the result of large plantings in the twenties and thirties. During the past few years, improved cultural practices, more adequate fertilizer applications, and increased irrigation have also been important contributing factors to the higher production levels.

A continuation of the uptrend in citrus production seems likely for several years but probably at a considerably lower rate than the last 3 or 4 years. Although plantings of peaches have increased in many areas, total deciduous fruit production seems likely to remain at about the present levels the next few years. Of course, production of all fruits is partly dependent upon relative prices. Favorable price relationships will encourage improved cultural practices, large fertilizer applications, irrigation, new plantings, and care of marginal plantings, whereas unfavorable prices will tend to limit production.

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Year and month	Industrial production (1935–39=100) [1]	Income of industrial workers (1935–39=100) [2]	1910–14=100				Index of prices received by farmers (August 1909–July 1914=100)			
			Wholesale prices of all commodities [3]	Prices paid by farmers		Farm wage rates	Livestock and products			
				Commodities	Commodities interest and taxes		Dairy products	Poultry and eggs	Meat animals	All livestock
1935	87	86	117	125	130	103	114	116	116	115
1936	103	100	118	124	127	111	125	114	118	120
1937	113	117	126	131	133	126	130	110	132	127
1938	89	91	115	123	126	125	114	108	115	113
1939	109	105	113	121	124	123	110	95	112	108
1940	125	119	115	122	125	126	119	96	111	112
1941	162	169	127	131	132	154	139	121	146	140
1942	199	241	144	152	150	201	162	151	188	173
1943	239	318	151	167	162	264	193	190	209	200
1944	235	325	152	176	170	315	198	174	200	194
1944—March	241	332	152	175	169	-------	199	162	203	194
April	239	327	152	175	169	292	196	151	203	191
May	237	327	152	175	169	-------	194	153	201	190
June	235	327	152	176	170	-------	192	154	200	189
July	231	320	152	176	170	328	194	165	197	190
August	232	324	152	176	170	-------	196	171	201	194
September	231	320	152	176	170	-------	198	179	200	196
October	232	320	152	176	170	325	201	190	201	199
November	232	317	152	177	171	-------	203	207	200	202
December	232	322	153	178	171	-------	203	211	198	202
1945—January	234	-------	153	179	172	324	202	199	203	202
February	235	-------	154	179	172	-------	200	183	209	201
March	-------	-------	-------	180	173	-------	198	175	211	200

Year and month	Index of prices received by farmers (August 1909–July 1914=100)									Parity ratio [4]
	Crops								All crops and livestock	
	Food grains	Feed grains and hay	Tobacco	Cotton	Oil bearing crops	Fruit	Truck crops	All crops		
1935	97	107	174	94	120	82	119	102	109	84
1936	108	102	165	95	112	92	104	107	114	90
1937	120	125	204	90	120	104	110	115	122	92
1938	75	71	176	67	88	70	88	80	97	77
1939	72	69	155	70	90	68	91	80	95	77
1940	84	82	136	77	96	73	111	88	100	80
1941	97	89	159	107	130	85	129	106	124	94
1942	120	111	252	149	172	114	163	142	159	106
1943	148	147	325	160	190	179	245	183	192	119
1944	165	166	354	164	209	215	212	194	195	115
1944—March	169	171	351	161	207	215	242	198	196	116
April	171	172	352	163	207	237	220	200	196	116
May	170	173	350	160	208	232	225	198	194	115
June	165	170	350	163	210	228	231	197	193	114
July	161	168	350	164	209	230	195	194	192	113
August	156	166	355	162	209	214	186	191	193	114
September	155	162	358	170	207	206	166	188	192	113
October	164	161	357	171	211	205	153	187	194	114
November	165	157	368	168	215	195	188	189	196	115
December	167	160	364	168	215	206	228	196	200	117
1945—January	169	163	365	163	214	205	262	200	201	117
February	169	165	360	161	215	211	223	197	199	116
March	171	166	359	163	215	211	203	196	198	114

[1] Federal Reserve Board, adjusted for seasonal variation, revised November 1943.
[2] Total income, adjusted for seasonal variation, revised February 1945.
[3] Bureau of Labor Statistics.
[4] Ratio of prices received by farmers to prices paid, interest and taxes.

NOTE.—The index numbers of industrial production and of industrial workers' income, shown above, are not comparable in several respects. The production index includes only mining and manufacturing; the income index also includes transportation. The production index is intended to measure volume, whereas the income index is affected by wage rates as well as by time worked. There is usually a time lag between changes in volume of production and workers' income since output can be increased or decreased to some extent without much change in the number of workers.

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